

**ABSTRACT OF THE DISCLOSURE**

A process is provided for producing a poly(arylene sulfide) polymer in which polymerization reactants comprising an aqueous alkali metal hydroxide and a polar organic compound are pre-reacted at a first temperature to form a mixture, then the mixture is reacted with a sulfur source at a second temperature under conditions sufficient to remove at least a portion of the water that is contained in the mixture, thereafter the thus dehydrated mixture is contacted with at least one dihaloaromatic compound under polymerization conditions.